

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

BC8

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
|-----------------|-------------|----------------------|---------------------|

09/503,282 02/14/00 HUYNH

D 230074-0223

EXAMINER

WM31/0606

TED R RITTMASER ESQ
FOLEY & LARDNER
2029 CENTURY PARK EAST
SUITE 3500
LOS ANGELES CA 90067-3021

SONG, H

ART UNIT

PAPER NUMBER

2131

DATE MAILED:

06/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/503,282

Applicant(s)

Hyunh et al.

Examiner

Ho S. Song

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 14, 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

Norman M. Wright
NORMAN M. WRIGHT
PRIMARY EXAMINER

AL20

Art Unit: 2131

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3,5-7,15,22 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu et al.(US 5,774,551).

In claims 1,5,15,22, Wu discloses a control unit having a data input path (fig.1).

Encryption unit in (col.3, lines 58-62). First and second authentication unit in (col.8, lines 61-66).

A local data path, independent of the data input path to the control unit, coupling the control unit to each of the encryption and authentication units and a second data path from the encryption unit to each authentication unit, including a data path from the first authentication unit to the second authentication unit in (fig.1 #115,109,123 and col.3, lines 56-66).

In claims 2,6, Wu disclose wherein data input path of the control unit is coupled to a processor bus and each of encryption and authentication units comprises a data input path coupled to the processor bus in (fig.1,#109,123).

In claim 7, Wu discloses first authentication unit and second authentication unit in (col.8, lines 61-65).

In claim 3, Wu discloses data input path of the control unit is coupled to a processor bus and each of encryption and authentication units comprises a data input path to the processor bus and means for reading and writing data on the processor bus in (see fig.3).

Art Unit: 2131

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4,8-21,23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al.(US 5,774,551).

In claims 4,8, Wu discloses all the limitations above. However, Wu does not disclose second data path comprising a daisy-chain connection between the encryption and authentication units. The examiner takes Official notice that chain is well known in the art. It is widely used in order to eliminate conflicting requests to use the channel(bus) to which all the devices are connected, each device is given a different priority.

In claims 9,16,23,Wu discloses encrypting and authenticating a first packet. Wu does not specifically disclose performing encryption on a first data packet and after completion of the encryption of the first data packet, performing authentication of the first packet and performing encryption of a second data packet prior to completion of authentication of the first data packet. The examiner takes Official notice that encrypting a second packet before authentication is well known in the art. For example, parallel encryption scheme where first and second packets are

Art Unit: 2131

encrypted at the same time where second packet does not wait for first packet to be authenticated thus allowing faster encryption when transmitting over the network.

In claim 10,17, Wu discloses step of performing a second authentication on the first data packet of data in (col.7, table 1).

In claims 11-14,18-21, Wu discloses appending data to first authentication and second authentication in (col.3, lines 56-66).

In claims 24-28 see claims rejection 10-14 above.

In claims 29-31 see claims rejection 9,23 above.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Nishioka et al(US 5,995,626) discloses method for processing first and second cipher text and authentication method.

b. Shambroom(US 5,923,756) discloses secure authentication method between client and network server.

c. Caputo(US5,778,071) discloses a portable security module for encryption and authentication method.

Art Unit: 2131

5. Any inquiry concerning this communication should be directed to Ho S. Song at telephone number (703)305-0042. The examiner can normally be reached on Tuesday through Friday from 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail Hayes can be reached at (703)305-9711.

Any inquiry of a general nature or relating to the status of this application or preceding should be directed to the Group receptionist, whose telephone number is (703)305-3900.

A handwritten signature in black ink, appearing to read "Ho S. Song". The signature is stylized with a large, looping "S" and a long horizontal stroke extending to the right.